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ABSTRACT

After a mask (R) is carried into a reserve room (RI) for temporarily storing before carrying into a mask room (15) filled with specific gas that has an impurity concentration lower than a first concentration (e.g. 1ppb) and that has a characteristic of absorbing little of exposure light, gas-replacement mechanisms (23, 24, etc.) replace gas in the reserve room with specific gas having an oxygen concentration (e.g. 10ppb) not lower than the first concentration. Therefore, when subsequently carrying the mask (R) into the mask room, impurities from the outside (including absorbent gas) can be substantially prevented from getting into the optical path inside the mask room. When replacing a wafer (W), gas in a reserve room (WI) is also replaced in the same way as the above. Accordingly, it is possible to suppress the decrease and variation of transmission of exposure light in optical paths inside the mask room and substrate room and to obtain stable and enough exposure power, the decrease and variation being caused by the absorption of exposure light energy. Additionally, because impurity concentrations of specific gas in the reserve rooms are set to be higher than those of the mask room and substrate room, the cost of the equipment, which is needed to set and keep the specific gas environment in the reserve rooms, can be reduced.